

# WEST

## End of Result Set

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L6: Entry 2 of 2

File: DWPI

Dec 23, 1993

DERWENT-ACC-NO: 1994-007468

DERWENT-WEEK: 199401

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TITLE: Cationic polymer compsns. for thickening aq. and non-aq. solns. - comprise crosslinked vinyl lactam, quaternised aminoalkyl acrylamide! or acrylate! and opt. polymerisable carboxylic acid

INVENTOR: SHIH, J S

## PRIORITY-DATA:

1992US-0906163

June 29, 1992

1992US-0899965

June 17, 1992

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 9325595 A1	December 23, 1993	E	019	C08F226/06
US 5321110 A	June 14, 1994	N/A	009	C08F226/10

INT-CL (IPC): C08F 220/04; C08F 220/06; C08F 220/10; C08F 220/34; C08F 220/56; C08F 220/60; C08F 226/02; C08F 226/06; C08F 226/10

ABSTRACTED-PUB-NO: WO 9325595A

## BASIC-ABSTRACT:

A cationic polymer comprises: (a) a strongly swellable, moderately crosslinked vinyl lactam including 0.1-0.8 wt.% of a crosslinking agent; (b) a quaternised amino alkyl acrylamide or acrylate; and opt. (c) a polymerisable carboxylic acid. Pref. cationic (quaternised) polymer prod. is of formula (I); where: R = 3-8C alkylene, pref. 3-5C alkylene; R1, R2 = H or CH3; R3, R4 = 1-18C alkylene opt. subst'd. with alkyl; r+t = 0 or 1; R5, R6 = lower alkyl; Z = oxygen or nitrogen; if oxygen R2 is absent; M = polymerisable carboxylic acid; n = 1-99 mol.%, pref. 50-90 mole.%; m = 1-99 mole.%, pref. 7-25 mole.%; p = 0-98 mole.%, pref. 3-25 mole.%; m+n+p = 100 mole.%; R7sx(-) is a quaternising gp. where: R7 = lower alkyl, pyrrolidonyl alkyl, carboxymethylene or a Zwitterion of beta-propiolactone; X = anion derived from halogen, SO3, SO4, HSO4 and R7SO4; and s = reciprocal of the number of negative charges in X; and q, q' = 0.01-1, wherein the polymer includes 1-100% of a quaternised form of monomer.

USE/ADVANTAGE - Compsns. of the cationic polymers effectively thicken both aq. and non-aq. solns. at a concn. of 1-10 wt.% of the polymer while imparting cationic characteristics to the resulting prod.. They find particular application as thickening agents in cosmetic preparations, e.g. shampoo and hair conditioner prods., and as controlled release or bioadhesive agents.

ABSTRACTED-PUB-NO:

US 5321110A EQUIVALENT-ABSTRACTS:

Strongly swellable moderately cross-linked powdery quaternised vinyl lactam polymers of formula (I) comprises the reaction prod. of a vinyl lactam, an aminoalkyl acrylamide or acrylate, opt. a polymerisable carboxylic acid at 0.1-0.8 wt.% of a cross-linking agent. In the formula, R is 3-8(3-5)C alkylene; R1 and R2 are independently H or Me; R3 and R4 are each 1-18C alkylene opt.

substd. with alkyl; r+t is 1 or 0; R5 and R6 are independently lower alkyl; Z is 0 or N; if 0 R2 is absent; M is polymerisable carboxylic acid; n is 1-99 mole%; m+n+p is 100 mole %; pref. n is 50-90 mole %, m 7-25 mole % and p 3-25 mole %; R7SX- is quaternising gp. in which R7 is lower alkyl, pyrrolidonyl alkyl, carboxymethylene or a zwitterion of beta-propio lactone; X is anion, viz. halo, SO<sub>3</sub>, SO<sub>4</sub>, HSO<sub>4</sub> and R7SO<sub>4</sub>; s is reciprocal of -ve. charges in X1; q and q' range from 0.01-1; the polymer includes 1-100% of a quaternised form of monomer and has aq. gel vol. at 1-10% wt. concn. of 50-150 ml/g and Brookfield viscosity at aq. concn. of 4% wt. of 10000-57000 cps. Specifically claimed aminoalkylarylamides include N-(3-(dimethylamino)-propyl)methacrylamide. Prepn. is by pptn. polymerisation in a non-polar organic solvent (cyclic or acyclic aliphatic hydrocarbon).

USE - 1-10% wt. of polymer compsn. in aq. or non-aq. medium are thickening agents with cationic characteristics used for cosmetic and moisturising creams and lotions, hair treatment compsns., shampoos, hair conditioners, etc.

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L5: Entry 2 of 2

File: DWPI

Aug 3, 1999

DERWENT-ACC-NO: 1997-489337

DERWENT-WEEK: 199952

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TITLE: Stable conditioning shampoo composition - comprises anionic surfactant, organic, crosslinked, cationic polymer, silicone hair conditioning agent and water

INVENTOR: GUSKEY, S M; ROYCE, D A

PRIORITY-DATA:

1996US-0622776

March 27, 1996

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
BR 9708436 A	August 3, 1999	N/A	000	A61K007/06
<u>WO 9735544 A1</u>	October 2, 1997	E	028	A61K007/06
AU 9723201 A	October 17, 1997	N/A	000	A61K007/06
EP 889714 A1	January 13, 1999	E	000	A61K007/06
JP 11507077 W	June 22, 1999	N/A	036	A61K007/075
CN 1219862 A	June 16, 1999	N/A	000	A61K007/06

INT-CL (IPC): A61K 7/06; A61K 7/075; A61K 7/50; C11D 3/37

ABSTRACTED-PUB-NO: WO 9735544A

## BASIC-ABSTRACT:

The stable conditioning shampoo composition comprises: (a) 5-50 ( especially 8-30)wt% of an anionic surfactant selected from anionic surfactants, zwitterionic surfactants and/or amphoteric surfactants having an attached group that is anionic at the pH of the composition; (b) 0.025-5wt% of an organic, crosslinked, cationic polymer having a cationic charge density of 4-7 ( especially 4.2-5.5) meq/g and comprising a crosslinking agent and a monomer unit selected from dialkylaminoalkyl (meth)acrylamides and/or dialkylaminoalkyl (meth)acrylates, each of the monomer unit being cationic at the pH of the composition; (c) 0.01-10wt% of a silicone hair conditioning agent; and (d) 20-94wt% water. Also claimed is a conditioning composition comprising components(a), (b) and (d) per se.

Advantage - The compositions exhibit improved stability and conditioning benefits.

**WEST**[Generate Collection](#)**Search Results - Record(s) 1 through 2 of 2 returned.**☐ 1. Document ID: WO 9735544 A1

L5: Entry 1 of 2

File: EPAB

Oct 2, 1997

PUB-NO: WO009735544A1

DOCUMENT-IDENTIFIER: WO 9735544 A1

TITLE: TITLE DATA NOT AVAILABLE

PUBN-DATE: October 2, 1997

**ABSTRACT:**

Disclosed are aqueous conditioning shampoo compositions with improved stability and conditioning, which comprise an anionic deterative surfactant component and an organic, cross-linked, cationic hair conditioning polymer having a relatively high cationic charge density of from about 4 meq/gm to about 7 meq/gm. The cross-linked polymer consists essentially of a cross-linking agent and monomer units selected from the group consisting of dialkylaminoalkyl acrylamides, dialkylaminoalkyl methacrylamides, dialkylaminoalkyl acrylates, dialkylaminoalkyl methacrylates, and combinations thereof, wherein each of the monomer units in the cross-linked polymer are cationic at the pH of the shampoo composition.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
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☐ 2. Document ID: BR 9708436 A, WO 9735544 A1 , AU 9723201 A, EP 889714 A1, JP 11507077 W, CN 1219862 A

L5: Entry 2 of 2

File: DWPI

Aug 3, 1999

DERWENT-ACC-NO: 1997-489337  
DERWENT-WEEK: 199952  
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TITLE: Stable conditioning shampoo composition - comprises anionic surfactant, organic, crosslinked, cationic polymer, silicone hair conditioning agent and water

INVENTOR: GUSKEY, S M; ROYCE, D A

PRIORITY-DATA:  
1996US-0622776

March 27, 1996

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
BR 9708436 A	August 3, 1999	N/A	000	A61K007/06
WO 9735544 A1	October 2, 1997	E	028	A61K007/06
AU 9723201 A	October 17, 1997	N/A	000	A61K007/06
EP 889714 A1	January 13, 1999	E	000	A61K007/06
JP 11507077 W	June 22, 1999	N/A	036	A61K007/075
CN 1219862 A	June 16, 1999	N/A	000	A61K007/06

INT-CL (IPC): A61K 7/06; A61K 7/075; A61K 7/50; C11D 3/37

ABSTRACTED-PUB-NO: WO 9735544A  
BASIC-ABSTRACT:

The stable conditioning shampoo composition comprises: (a) 5-50 ( especially 8-30)wt% of an anionic surfactant selected from anionic surfactants, zwitterionic surfactants and/or amphoteric surfactants having an attached group that is anionic at the pH of the composition; (b) 0.025-5wt% of an organic, crosslinked, cationic polymer having a cationic charge density of 4-7 ( especially 4.2-5.5) meq/g and comprising a crosslinking agent and a monomer unit selected from dialkylaminoalkyl (meth)acrylamides and/or dialkylaminoalkyl (meth)acrylates, each of the monomer unit being cationic at the pH of the composition; (c) 0.01-10wt% of a silicone hair conditioning agent; and (d) 20-94wt% water. Also claimed is a conditioning composition comprising components(a), (b) and (d) per se.

Advantage - The compositions exhibit improved stability and conditioning benefits.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
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Term	Documents
WO-9735544-\$	0
WO-9735544-A1.DWPI,EPAB,JPAB,USPT.	2
WO-9735544-\$.DID..USPT,JPAB,EPAB,DWPI.	2

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Documents, starting with Document:

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Search Results - Record(s) 1 through 1 of 1 returned.

- ☐ 1. Document ID: EP 893117 A2, DE 19731764 A1, JP 11079957 A, CN 1209991 A  
L4: Entry 1 of 1 File: DWPI Jan 27, 1999

DERWENT-ACC-NO: 1999-155605  
DERWENT-WEEK: 200002  
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TITLE: Conditioner used in hair cosmetics, especially shampoo - is crosslinked and quaternised polymer based on a cationic or quaternisable monomer, and gives effective results without build-up effect

INVENTOR: DIEING, R; HOESSEL, P ; KOTHRAD, S ; RAUBENHEIMER, H ; SANNER, A ; SCHEHLMANN, V ; ZEITZ, K

PRIORITY-DATA:  
1997DE-1031764 July 24, 1997

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>EP 893117 A2</u>	January 27, 1999	G	012	A61K007/06
DE 19731764 A1	January 28, 1999	N/A	000	A61K007/075
JP 11079957 A	March 23, 1999	N/A	011	A61K007/075
CN 1209991 A	March 10, 1999	N/A	000	A61K007/075

INT-CL (IPC): A61K 7/06; A61K 7/075

ABSTRACTED-PUB-NO: EP 893117A  
BASIC-ABSTRACT:

NOVELTY - Conditioners used in formulations for hair cosmetics are polymers (I) obtained by:

(1) free-radical polymerisation of (a) 1-99.99 wt.% cationic or quaternisable monomer; (b) 0-98.99 wt.% water-soluble monomer; (c) 0-50 wt.% another comonomer; and (d) 0.01-10 wt.% di- or polyfunctional comonomer; and

(2) quaternisation, if monomer (a) is not quaternised.

USE - Polymers (I) are used as conditioners in hair cosmetics, especially shampoos (all claimed).

ADVANTAGE - Polymers (I) are more effective than usual cationic polymers and the corresponding non-crosslinked polymers, and do not cause a 'build-up' effect.

Full Title CIT.1 REV.1 CLS.1 PEF.1 DRAW.1

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Term	Documents
EP-893117-\$	0
EP-893117-A2.DWPI,EPAB,JPAB,USPT.	1
EP-893117-\$.DID..USPT,JPAB,EPAB,DWPI.	1

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Documents, starting with Document:

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Search Results - Record(s) 1 through 3 of 3 returned.

☒ 1. Document ID: US 5874524 A

L11: Entry 1 of 3

File: USPT

Feb 23, 1999

US-PAT-NO: 5874524

DOCUMENT-IDENTIFIER: US 5874524 A

TITLE: Preparation of polymer powders which are redispersible in an aqueous medium

DATE-ISSUED: February 23, 1999

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Pakusch; Joachim	Ludwigshafen	N/A	N/A	DEX
Dieing; Reinhold	Bad Durkheim	N/A	N/A	DEX
Tropsch; Jurgen	Romerberg	N/A	N/A	DEX

US-CL-CURRENT: 528/482; 523/342, 524/236, 524/814, 524/815, 524/817, 524/904, 525/934, 528/487, 528/501

## ABSTRACT:

Polymer powders which are redispersible in an aqueous medium are prepared by drying an aqueous polymer dispersion whose polymer particles dispersed in the aqueous medium have a positive or a negative electric surface charge, with the addition of a water-soluble polyelectrolyte as a drying assistant, the electric charge of the polyion being opposite to the electric surface charge of the disperse polymer particles.

27 Claims, 0 Drawing figures Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	K00C	Draw Desc	Image
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☒ 2. Document ID: US 5869032 A

L11: Entry 2 of 3

File: USPT

Feb 9, 1999

US-PAT-NO: 5869032

DOCUMENT-IDENTIFIER: US 5869032 A

TITLE: Quaternized copolymers suitable as active ingredients in cosmetic formulations, such as hair styling compositions

DATE-ISSUED: February 9, 1999

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Tropsch; Jurgen	Romerberg	N/A	N/A	DEX
Sanner; Axel	Frankenthal	N/A	N/A	DEX
Hossel; Peter	Schifferstadt	N/A	N/A	DEX
Raubenheimer; Hans-Jurgen	Ketsch	N/A	N/A	DEX
Schade; Christian	Ludwigshafen	N/A	N/A	DEX

US-CL-CURRENT: 424/70.15; 424/47, 424/78.03, 424/78.22, 424/78.24, 424/78.32, 525/326.9, 526/263, 526/264

## ABSTRACT:

Quaternized copolymers suitable as active ingredients in hair styling compositions are obtainable from N-vinylimidazoles, N-vinylcaprolactam, N-vinylpyrrolidone and, if required, further monomers.

13 Claims, 0 Drawing figures Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
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☒ 3. Document ID: US 4859756 A

L11: Entry 3 of 3

File: USPT

Aug 22, 1989

US-PAT-NO: 4859756

DOCUMENT-IDENTIFIER: US 4859756 A

TITLE: Polymers of oxyalkylated unsaturated quaternary ammonium salts, their preparation and their use

DATE-ISSUED: August 22, 1989

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Goertz; Hans-Helmut	Freinsheim	N/A	N/A	DEX
Oftring; Alfred	Ludwigshafen	N/A	N/A	DEX
Vogel; Friedrich	Wachenheim	N/A	N/A	DEX

US-CL-CURRENT: 526/263; 526/277, 526/304

## ABSTRACT:

Polymers are obtained by polymerization of water-soluble monomers which contain one or more polymerizable olefinic double bonds and a quaternary nitrogen atom which is substituted by one or more hydroxyalkyl groups and are present in the form of halide-free salts, with or without further comonomers.

5 Claims, 0 Drawing figures Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
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Term	Documents
(9 AND 10).USPT,JPAB,EPAB,DWPI.	3

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